Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	06 February 2026
Team ID	LTVIP2026TMIDS66281
Project Name	Gemini historical artifact description
Maximum Marks	4 marks

Technical Architecture:

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

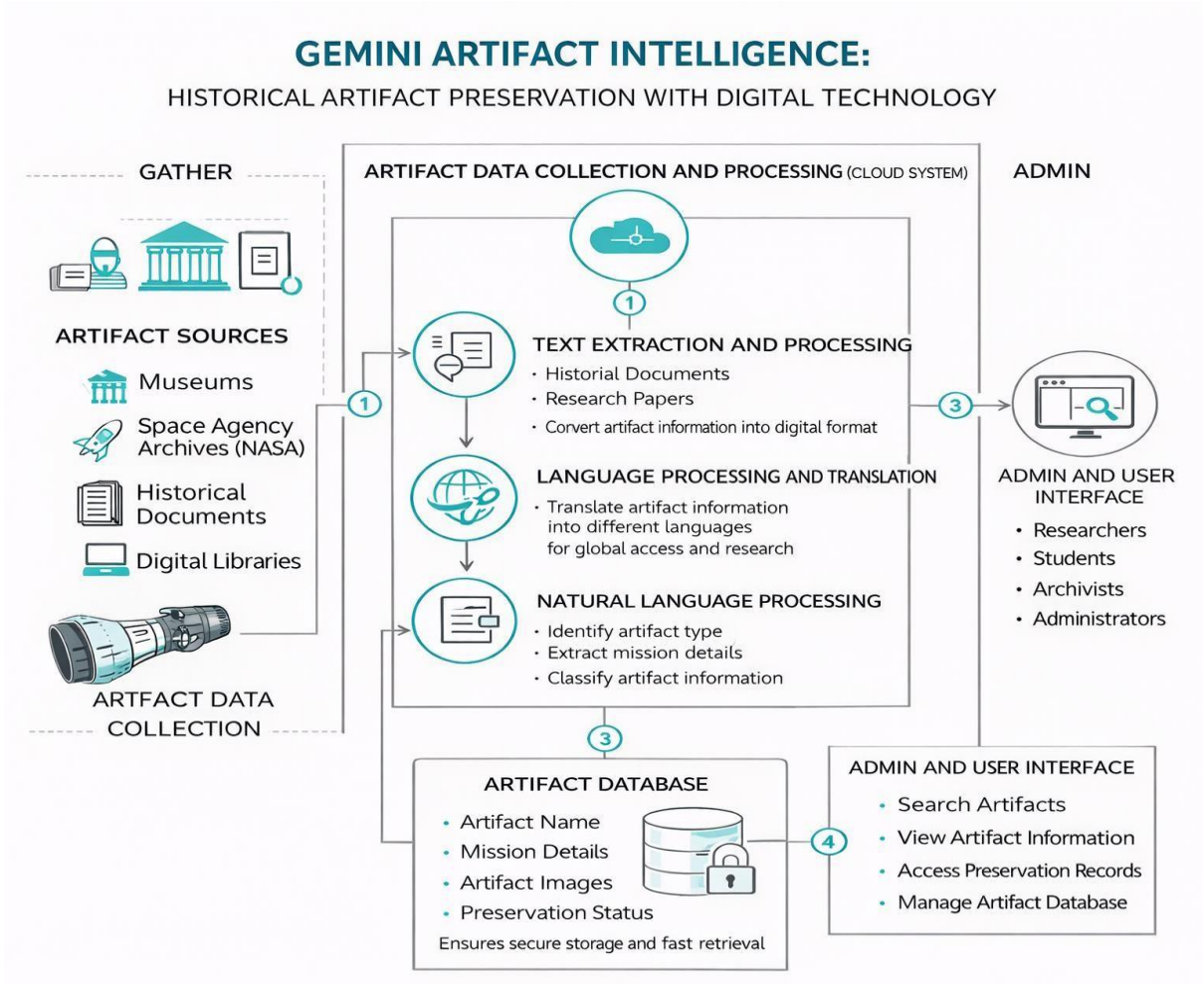

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Critical element designed for both Traffic Managers and everyday users, ensuring an intuitive and informative experience.	HTML, CSS, JavaScript
2.	Application Logic-1	Involves a robust backend system responsible for processing, analyzing, and managing traffic data.	Python
3.	Database	Involves the storage and management of diverse traffic data for analysis.	File Manager, csv
4.	File Storage/ Data	Involves managing diverse types of data, including raw traffic data, models, and configuration files.	Local System, Google Drive
5.	Frame Work	It is a crucial part of our program as it is responsible for connecting the frontend with the backend.	Python Flask

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Open-source frameworks can accelerate development and ensure the reliability of Gemini.	Python's Flask
2.	Scalability	Using cameras to collect data and to make models for specific locations.	Computer vision, dynamic databases.
3.	Performance	Regular performance testing, monitoring, and optimization are integral components of the development and maintenance processes	R squared, Root mean squared error, Root Mean Square deviation

4.	Availability	Website can be made available all time in a webserver. This makes the website running without any issues	High speed Linux based webservers.